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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,307	12/23/2003	Qi Zhang	P-6215-US	5556

49444 7590 01/25/2007  
PEARL COHEN ZEDEK LATZER, LLP  
1500 BROADWAY, 12TH FLOOR  
NEW YORK, NY 10036

EXAMINER
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CHAVIS, JOHN Q

ART UNIT	PAPER NUMBER
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2193

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,307	<b>Applicant(s)</b> ZHANG ET AL.	
	<b>Examiner</b> John Chavis	<b>Art Unit</b> 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/27/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhablania (6,965,906) in view of the non patent literature reference cited by the applicant as 43258.

1. A What is claimed is:

Dhablania/43258

method comprising: translating

See the title and the abstract.

a first sequence of instructions

associated with a source architecture

into a second sequence of instructions

associated with a target architecture,

wherein said first sequence includes

See page 1 line 65-page 2 line 11,

one or more floating point control

decimal instructions are considered

instructions and said second sequence

not to include a floating point

does not include a floating point

control instruction.

control instruction, and

wherein results produced by

See the summary of the invention.

executing said second sequence on a processor that complies with said target architecture are substantially the same as results produced by executing said first sequence on a processor that complies with said source architecture.

Assuming that the applicant does not believe that Dhablania' s system provides for " substantially the same results, the feature is considered to be provided by the non patent literature

" Rounding mode independent

implementation of float to integer truncation (43258). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to utilize the feature in Dhablania' s system for the same reason to acquire substantially the same results by enabling selection of the desired mode of rounding to provide the desired results.

2. The method of claim 1, wherein said second sequence includes an instruction to round an initial floating point number to a first floating point number using round to zero rounding mode, regardless of a rounding mode

See the 43258 reference.

setting of the target architecture.

Some mode has to be selected and each mode provides substantially similar results. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to select a specific rounding mode for use in Dhablania's system to provide a certain precision desired, see again the 43258 reference.

3. The method of claim 1, wherein said first sequence of instructions and said second sequence of instructions are binary code.

Code submitted to a computer is considered binary code and therefore this feature is considered inherent to Both cited references (for example, see as an example only the Hanson reference (5,652,862; col. 1 lines 19-22.

4. The method of claim 1, further comprising: identifying in said first sequence a rounding mode of one of said one or more floating point control instructions.

See the first page of the 43258 reference, specifically the third para.

In reference to claims 5-8, 9-14, 15-17, 18-20, 21-23 and 24-26, see the rejections of claim 1-4 above and again note that reference 43258 provides for selection of modes (which is merely considered a choice of design; since, some mode has to be

utilized and the mode selected is considered to be based on the level of precision desired.

3. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abdullah et al. (6,502,115) and further in view of 43258.

1. A What is claimed is:

Abdullah/43258

method comprising: translating

See the title and the abstract.

a first sequence of instructions

associated with a source architecture

into a second sequence of instructions

associated with a target architecture,

wherein said first sequence includes

See figs. 11 & 13, Abdullah' s integer

one or more floating point control

instructions are considered

instructions and said second sequence

not to include a floating point

does not include a floating point

control instruction.

control instruction, and

wherein results produced by

See the summary of the invention.

executing said second sequence on a

Assuming that the applicant does not

processor that complies with said

believe that Abdullah' s system

target architecture are substantially the

provides for " substantially the same

same as results produced by executing

results, the feature is considered to

said first sequence on a processor that  
complies with said source architecture.

2. The method of claim 1, wherein  
said second sequence includes an  
instruction to round an initial floating  
point number to a first floating point  
number using round to zero rounding  
mode, regardless of a rounding mode  
setting of the target architecture.

be provided by the non patent literature

“ Rounding mode independent

implementation of float to integer  
truncation (43258). Therefore, it would  
have been obvious to a person having  
ordinary skill in the art at the time of the  
invention to utilize the feature in  
Abdullah’ s system for the same  
reason to acquire substantially the same  
results by enabling selection of the  
desired mode of rounding to provide the  
desired results.

See the 43258 reference.

Some mode has to be selected and  
each mode provides substantially similar  
results. Therefore, it would have been  
obvious to a person having ordinary skill  
in the art at the time of the invention to  
select a specific rounding mode for use  
in Abdullah’ s system to provide a

certain precision desired, see again the 43258 reference.

3. The method of claim 1, wherein said first sequence of instructions and said second sequence of instructions are binary code.

Code submitted to a computer is considered binary code and therefore this feature is considered inherent to Both cited references (for example, see as an example only the Hanson reference (5,652,862; col. 1 lines 19-22.

4. The method of claim 1, further comprising: identifying in said first sequence a rounding mode of one of said one or more floating point control instructions.

See the first page of the 43258 reference, specifically the third para.

In reference to claims 5-8, 9-14, 15-17, 18-20, 21-23 and 24-26, see the rejections of claim 1-4 above and again note that reference 43258 provides for selection of modes (which is merely considered a choice of design; since, some mode has to be utilized and the mode selected is considered to be based on the level of precision desired.

4. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberman (6,131,104) and further in view of 43258.

1. A What is claimed is:

Oberman/43258



method comprising: translating  
a first sequence of instructions  
associated with a source architecture  
into a second sequence of instructions  
associated with a target architecture,  
wherein said first sequence includes  
one or more floating point control  
instructions and said second sequence  
does not include a floating point  
control instruction, and

wherein results produced by  
executing said second sequence on a  
processor that complies with said  
target architecture are substantially the  
same as results produced by executing  
said first sequence on a processor that  
complies with said source architecture.

See the title and the abstract.

See the background of the invention.

See the summary of the invention.

Assuming that the applicant does not  
believe that Oberman' s system  
provides for " substantially the same  
results, the feature is considered to  
be provided by the non patent literature  
" Rounding mode independent  
implementation of float to integer  
truncation (43258). Therefore, it would  
have been obvious to a person having  
ordinary skill in the art at the time of the

2. The method of claim 1, wherein said second sequence includes an instruction to round an initial floating point number to a first floating point number using round to zero rounding mode, regardless of a rounding mode setting of the target architecture.

3. The method of claim 1, wherein said first sequence of instructions and said second sequence of instructions

invention to utilize the feature in Oberman' s system for the same reason to acquire substantially the same results by enabling selection of the desired mode of rounding to provide the desired results.

See the 43258 reference.

Some mode has to be selected and each mode provides substantially similar results. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to select a specific rounding mode for use in Oberman' s system to provide a certain precision desired, see again the 43258 reference.

Code submitted to a computer is considered binary code and therefore this feature is considered inherent to

are binary code.

Both cited references (for example, see as an example only the Hanson reference (5,652,862; col. 1 lines 19-22.

4. The method of claim 1, further comprising: identifying in said first sequence a rounding mode of one of said one or more floating point control instructions.

See the first page of the 43258 reference; specifically the third para.

In reference to claims 5-8, 9-14, 15-17, 18-20, 21-23 and 24-26, see the rejections of claim 1-4 above and again note that reference 43258 provides for selection of modes (which is merely considered a choice of design; since, some mode has to be utilized and the mode selected is considered to be based on the level of precision desired.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2193

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

A handwritten signature in black ink, appearing to read 'John Chavis', with a stylized flourish at the end.

John Chavis  
Primary Examiner AU-2193